

West Virginia Department of Environmental Protection

Harold D. Ward

Cabinet Secretary

Permit to Operate



Pursuant to

Title V

of the Clean Air Act

Issued to:

Eastern Gas Transmission and Storage, Inc.

Deep Valley Compressor Station

R30-09500007-2021

Laura M. Crowder

Director, Division of Air Quality

Issued: August 10, 2021 • Effective: August 24, 2021
Expiration: August 10, 2026 • Renewal Application Due: February 10, 2026

Permit Number: **R30-09500007-2021**
Permittee: **Eastern Gas Transmission and Storage, Inc.**
Facility Name: **Deep Valley Compressor Station**
Permittee Mailing Address: **925 White Oaks Blvd., Bridgeport, WV 26330**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Deep Valley, Tyler County, West Virginia
Facility Mailing Address: CR 56/1, Deep Valley, WV 26415
Telephone Number: (304) 873-1923
Type of Business Entity: Corporation
Facility Description: Natural Gas Transmission Facility
SIC Codes: 4922
UTM Coordinates: 512.34 km Easting • 4355.01 km Northing • Zone 17

Permit Writer: Beena Modi

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits**1.1. Emission Units**

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001-01	EN01	Reciprocating Engine/Integral Compressor; Ajax DPC-800; 2SLB	1989	800 HP	N/A
001-02	EN02	Reciprocating Engine/Integral Compressor; Ajax DPC-800; 2SLB	1989	800 HP	N/A
002-01	EG01	Emergency Generator, Cummins GM 8.1L; 4SRB	2012	192.5 HP	S1
002-02	EG02	Emergency Generator, Cummins GM 8.1L; 4SRB	2012	192.5 HP	S2
DEHY02*	DEHY02(2C)	Dehydrator Still Column	2015	10 mmscf/day	2C
	n/a	Dehydrator Flash Tank			None**
RBR02*	RBR02	Reboiler	2015	0.275 mmBtu/hr	N/A
2C*	2C	Thermal Oxidizer	2015	4.00 mmBtu/hr	N/A
TK01	TK01	Horizontal Above Ground Ethylene Glycol Storage Tank	2008	1000 gallons	N/A
TK02	TK02	Horizontal Above Ground Tri-Ethylene Glycol Storage Tank	1998	1000 gallons	N/A
TK03	TK03	Horizontal Above Ground Waste Water Storage Tank	2003	230 gallons	N/A
TK04	TK04	Horizontal Above Ground Produced Fluids Storage Tank	2008	4000 gallons	N/A
TK05	TK05	Horizontal Above Ground Lube Oil Storage Tank	2008	3040 gallons	N/A
TK06	TK06	Vertical Above Ground Waste Water Storage Tank	2003	500 gallons	N/A
TK07	TK07	Horizontal Above Ground Used Oil Storage Tank	2008	1000 gallons	N/A

*This equipment authorized by Permit R13-1104F.

** Emissions from the flash tank are captured and recycled/returned to the plant by the facility compressor engines.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1104F	August 31, 2015
G60-C029	February 10, 2011

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance
CEM	Continuous Emission Monitor		Standards
CES	Certified Emission Statement	PM	Particulate Matter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than
CO	Carbon Monoxide		10µm in diameter
C.S.R. or CSR	Codes of State Rules	pph	Pounds per Hour
DAQ	Division of Air Quality	ppm	Parts per Million
DEP	Department of Environmental Protection	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	SIP	State Implementation Plan
lbs/hr or lb/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
m	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
mm	Million	TSP	Total Suspended Particulate
mmBtu/hr	Million British Thermal Units per Hour	USEPA	United States Environmental Protection Agency
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour	UTM	Universal Transverse Mercator
NA or N/A	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.**[45CSR§30-6.6.a.]**

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.
[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.
[45CSR§30-5.1.d.]
- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

[45CSR§17-3.1 State-Enforceable only.]

- 3.1.10. Only those emission units/sources as identified in Table 1.0 with an asterisk(*), with the exception of any *de minimis* sources as identified under Table 45-13B of 45CSR13, are authorized by Permit R13-1104F. In accordance with the information filed in Permit Application R13-1104F, the emission units/sources identified in Table 1.0 with an asterisk(*) shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.0.

[45CSR13, R13-1104, 4.1.1. (DEHY02, RBR02, 2C)]

3.2. Monitoring Requirements

- 3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method. [45CSR13, R13-1104, 3.2.1.]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-1104, 4.4.1 and General Permit Registration G60-C029 and [DC](#), 4.2.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective

actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. N/A

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. N/A

3.8. Emergency Operating Scenario

- 3.8.1. For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:
 - a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
 - b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;

- c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
- d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
- e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
 - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
 - ii. Identification of the engine(s) being temporarily replaced;
 - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
 - iv. Projected duration of the replacement engine(s); and
 - v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.0. Reboiler Requirements [RBR02]

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. **[45CSR§2-3.1; 45CSR13, R13-1104, 4.1.4.d.]**

4.1.2. The Glycol Dehydrator Reboiler, identified as RBR02, shall meet the following requirements:

- a. The maximum design heat input shall not exceed 0.275 mmBTU/hr and shall only be fired by natural gas;
- b. The maximum emissions from the Reboiler's combustion exhaust shall not exceed the limits given in the following table:

Reboiler Emission Limits

Pollutant	Hourly (lb/hr)	Annual (ton/yr)
CO	0.09	0.41
NO _x	0.11	0.48

- c. As the annual emissions are based on 8,760 hours of operation, there is no annual limit on hours of operation or natural gas combusted on an annual basis for the Reboiler. **[45CSR13, R13-1104, 4.1.4]**

4.2. Monitoring Requirements

4.2.1. Compliance with the visible emission requirements of section 4.1.1 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 4.1.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control. **[45CSR§2-3.2]**

4.2.2. **Fuel Burning Unit Visibility Compliance.** For the purposes of demonstrating compliance with the visible emission standard set forth in Condition 4.1.1., the permittee shall do the following:

- a. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with section 4.1.1 of this permit. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.
- b. The permittee shall maintain records of all monitoring data required by section 4.2.2 of this permit documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the

results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80 °F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

- c. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR13, R13-1104, 4.2.2.]

4.3. Testing Requirements

- 4.3.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3.1, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations or minimum control device efficiencies established in this permit and/or applicable regulations.

[45CSR13, R13-1104, 4.3.1.]

- 4.3.2. The permittee shall meet all applicable performance testing requirements given in 45CSR2.

[45CSR13, R13-1104, 4.3.3.]

4.4. Recordkeeping Requirements

- 4.4.1. The permittee shall meet all applicable record-keeping requirements given in 45CSR2.

[45CSR13, R13-1104, 4.4.4.]

4.5. Reporting Requirements

- 4.5.1. None.

4.6. Compliance Plan

- 4.6.1. None.

5.0 DEHY and Thermal Oxidizer Requirements [DEHY02, 2C]**5.1. Limitations and Standards**

5.1.1. Reserved

5.1.2. Reserved

5.1.3. The maximum wet natural gas throughput to the Inegral triethylene glycol (TEG) Glycol Dehydration Unit (GDU), identified as DEHY02, shall not exceed 10 mmscf/day or 3,650 mmscf/year.

[45CSR13, R13-1104, 4.1.2.]

5.1.4. The Glycol Dehydration Unit, identified as DEHY02, shall meet the following requirements:

- a. The maximum emissions from the Glycol Dehydrator Regeneration Still Vent, as emitted after combustion at the thermal oxidizer (2C), shall not exceed the limits given in the following table:

Glycol Dehydrator Regeneration Still Vent Controlled Emission Limits⁽¹⁾

Pollutant	PPH	TPY
VOC	5.23	22.92
Benzene	0.08	0.35
Ethylbenzene	0.05	0.20
n-Hexane	0.05	0.20
Toluene	0.38	1.68
Xylene	1.52	6.67
Total HAPs	2.14	9.39

(1) Emissions based on GRI-GLYCALC Version 4.0 using wet gas throughputs as limited under 5.1.3 and including a 20% safety factor.

- b. Vapors captured from the Glycol Dehydrator Flash Tank shall be captured by the plant compression and recycled back into the plant using a closed vent process; and

c. 40 CFR 63, Subpart HH: General Standard

Except as specified in Condition 5.1.4.d., the owner or operator of an affected source located at an existing or new area source of HAP emissions shall comply with the applicable standards specified below:

1. Each owner or operator of an area source located within an UA plus offset and UC boundary (as defined in 40 CFR §63.761) shall comply with the provisions specified in paragraphs i. through iii. of this section.
 - i. The control requirements for glycol dehydration unit process vents specified in 40 CFR §63.765;
 - ii. The monitoring requirements specified in 40 CFR §63.773; and

- iii. The recordkeeping and reporting requirements specified in 40 CFR §§63.774 and 63.775.
2. Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in 40 CFR §63.761) shall comply with paragraphs i. through iii. of this section.

- i. Determine the optimum glycol circulation rate using the following equation:

$$L_{OPT} = [1.15 * (3.0 \text{ gal TEG/lb H}_2\text{O})] * [F * (I - O) / (24 \text{ hr/day})]$$

Where:

L_{OPT} = Optimal circulation rate, gal/hr.

F = Gas flowrate (MMSCF/D).

I = Inlet water content (lb/MMSCF).

O = Outlet water content (lb/MMSCF).

3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H₂O).

1.15 = Adjustment factor included for a margin of safety.

- ii. Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with paragraph 2.i. of this section. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with paragraph 2.i., the owner or operator must calculate an alternate circulation rate using GRI-GLYCalc™, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with 40 CFR §63.775(c)(7).
- iii. Maintain a record of the determination specified in paragraph 2.ii. in accordance with the requirements in 40 CFR §63.774(f) and submit the Initial Notification in accordance with the requirements in 40 CFR §63.775(c)(7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with paragraph 2.i. or ii. of this section and submit the information specified under 40 CFR §63.775(c)(7)(ii) through (v).

d. **40 CFR 63, Subpart HH: Exemptions**

Exemptions. The owner or operator of an area source is exempt from the requirements in Condition 5.1.4.c. if the criteria listed in paragraph 1. or 2. below are met, except that the records of the determination of these criteria must be maintained as required in 40 CFR § 63.774(d)(1).

1. The actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in section 5.3.4.a.; or
2. The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in section 5.3.4.b.

[45CSR13, R13-1104, 4.1.3.; 45CSR34; 40 CFR §§63.764(d) and (e)(1)]

5.1.5. The Thermal Oxidizer is subject to 45CSR6. The applicable requirements of 45CSR6 include but are not limited to the following:

1. The permittee shall not cause, suffer, allow or permit particulate matter to be discharged from the thermal oxidizers into the open air in excess of the quantity determined by use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

<u>Incinerator Capacity</u>	<u>Factor F</u>
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

[45CSR§6-4.1 and 45CSR13, R13-1104, 4.1.5.h(1)]

2. No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater. **[45CSR§6-4.3 and 45CSR13, R13-1104, 4.1.5.h(2)]**
3. The provisions of 5.1.5.2. shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up. **[45CSR§6-4.4 and 45CSR13, R13-1104, 4.1.5.h(3)]**
4. No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air. **[45CSR§6-4.5 and 45CSR13, R13-1104, 4.1.5.h(4)]**
5. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors. **[45CSR§6-4.6 and 45CSR13, R13-1104, 4.1.5.h(5)]**
6. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. **[45CSR§6-8.2 and 45CSR13, R13-1104, 4.1.5.h(6)]**

5.1.6. The permittee shall operate the Questor Q100 Thermal Oxidizer, identified as 2C, according to the following requirements:

- a. The combustion exhaust emissions from the Thermal Oxidizer (does not include pass-through VOC/HAP emissions from the GDU Regenerator Still Vent) shall not exceed the following limits:

Thermal Oxidizer Emission Limits

Pollutant	Hourly (lb/hr)	Annual (ton/yr)
CO	1.50	6.50
NO _x	0.33	1.40

- b. The Thermal Oxidizer shall have an MDHI not to exceed 4.00 mmBtu/hr;
- c. The pilot flame shall be present at all times when the thermal oxidizer is operating, as determined by the methods specified in Condition 5.2.2.;
- d. The Thermal Oxidizer shall be designed for and operated with no visible emissions as determined by the methods specified in Condition 5.2.3. except for either 1. or 2. below:
 1. periods not to exceed a total of one minute during any 15 minute period, determined on a monthly basis; or
 2. periods not to exceed a total of 2 minutes during any hour, determined on a quarterly basis if the enclosed combustion device installed was a model tested under 40 CFR §60.5413(d) which meets the criteria in 40 CFR §60.5413(d)(11).
- e. The Thermal Oxidizer shall be operated at all times when emissions may be vented to it. To ensure compliance with Condition 5.1.6(e), the permittee shall monitor in accordance with 5.2.2.;
- f. The Thermal Oxidizer shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon combustion rate of 95.0%; and
- g. The permittee shall operate and maintain the Thermal Oxidizer according to the manufacturer's specifications for operating and maintenance requirements to maintain the guaranteed control efficiency given under Condition 5.1.6.f. To demonstrate compliance with Condition 5.1.6.g., the permittee shall maintain records of the manufacturer's specifications for operating and maintenance requirements to maintain the control efficiency.

[45CSR13, R13-1104, 4.1.5.a. through g. (2C)]

- 5.1.7. **Closed Vent Requirements.** The permittee shall meet the following requirements for delivering vapors to the Thermal Oxidizer:
- a. The closed vent system shall be designed and operated: (a) with no detectable emissions as determined using olfactory, visual, and auditory inspections; and (b) to route all gases, vapors, and fumes emitted from the system to the applicable control device in order to be in compliance with minimum control efficiency requirements for each control device; or (c) route all gases, vapors, and fumes emitted from the system to a process as required;
 - b. If a bypass line exists, the permittee shall either: (a) secure the bypass valve with a car-seal or a lock-and-key type configuration in the non-diverting position to prevent inadvertent bypass; or (b) install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process to the atmosphere; and

- c. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to requirement 5.1.7.b.

[45CSR13, R13-1104, 4.1.6.(2C)]

5.1.8. Reserved

- 5.1.9. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 (2C) and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11. and 45CSR13, R13-1104, 4.1.8.]

5.2. Monitoring Requirements

- 5.2.1. **GDU Wet Gas Throughput.** For the purposes of demonstrating compliance with the maximum wet gas throughput limit set forth in section 5.1.3., the permittee shall monitor daily, monthly and rolling twelve month records of the wet gas throughput of the Glycol Dehydration Unit (DEHY02).

[45CSR13, R13-1104, 4.2.1.]

- 5.2.2. **Thermal Oxidizer Pilot Flame Monitoring.** To demonstrate compliance with the pilot flame requirements of section 5.1.6.c., the permittee shall follow both a. and b., or as an alternative, follow just c. Further, the permittee is eligible for an exemption to the requirements under a. through c. as given under d:

- a. At a minimum frequency of once per calendar month when the GDU operates at least one consecutive 24 hour period during the month, conduct visual inspections to confirm that the pilot is lit when vapors are being routed to the enclosed combustion device and that the continuous burning pilot flame is operating properly;
- b. For any absence of pilot flame, or other indication of smoking or improper equipment operation, you must ensure the equipment is returned to proper operation as soon as practicable after the event occurs. At a minimum, you must:
 - 1. Check the air vent for obstruction. If an obstruction is observed, you must clear the obstruction as soon as practicable.
 - 2. Check for liquid reaching the combustor;
- c. As an alternative, the permittee may demonstrate compliance with the pilot flame requirements of section 5.1.6.c. by continuously monitoring using a thermocouple or any other equivalent device to detect the presence of a flame when emissions are vented to it; and
- d. The permittee is exempt from the pilot flame requirements of paragraphs a. and b. of this section if the permittee installed an enclosed combustion device model that was tested under 40 CFR § 60.5413(d) which meets the criteria in 40 CFR § 60.5413(d)(11). To demonstrate compliance with section 5.2.2.d., the permittee shall maintain a record of the performance test results conducted by the manufacturer.

[45CSR13, R13-1104, 4.2.3.]

- 5.2.3. **Thermal Oxidizer Visibility Monitoring.** To demonstrate compliance with the visible emissions requirements of section 5.1.6.d., the permittee shall conduct the following checks and/or opacity

monitoring and recordkeeping:

- a. The visible emission check shall determine the presence or absence of visible emissions. The observations shall be conducted according to Section 11 of EPA Method 22. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course. The observation period shall be:
 1. *[reserved]*
 2. a minimum of 15 minutes if demonstrating compliance with section 5.1.6.d.1.; or
 3. a minimum of 1 hour if demonstrating compliance with section 5.1.6.d.2.
- b. The visible emission check shall be conducted initially within 180 days of start-up to demonstrate compliance;
- c. If during this visible emission check or at any other time visible emissions are observed, compliance with section 5.1.6.d. shall be determined by conducting opacity tests in accordance with Method 9 of 40 CFR 60, Appendix A; and
- d. For the purpose of demonstrating compliance with the visible emissions and opacity requirements, the permittee shall maintain records of the visible emission opacity tests and checks. The permittee shall maintain records of all monitoring data required by section 5.2.3.a. documenting the date and time of each visible emission check, the emission point or equipment / source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13, R13-1104, 4.2.5.]

5.2.4. Closed Vent Monitoring. To demonstrate compliance with the closed vent system requirements of section 5.1.7, the permittee shall:

- a. Initial requirements. Conduct an initial visual, olfactory, and auditory inspection for defects that could result in air emissions within 180 days of start-up. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.
 - i. The annual inspection shall include the bypass inspection, conducted according to paragraph c. of this section.
 - ii. In the event that a leak or defect is detected, you must repair the leak or defect as soon as practicable. Grease or another applicable substance must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.
 - iii. Delay of repair of a closed vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if you determine that emissions

- resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. You must complete repair of such equipment by the end of the next shutdown.
- b. Continuous requirements. Conduct an annual visual, olfactory, and auditory inspection for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.
 - i. The annual inspection shall be conducted within 365 calendar days from the date of the previous inspection or earlier.
 - ii. The annual inspection shall include the bypass inspection, conducted according to paragraph c. of this section.
 - c. Bypass inspection. Visually inspect the bypass valve during the initial and annual inspection for the presence of the car seal or lock-and-key type configuration to verify that the valve is maintained in the non-diverting position to ensure that the vent stream is not diverted through the bypass device. If an alternative method is used, conduct the inspection of the bypass as described in the operating procedures.
 - d. Unsafe to inspect requirements. You may designate any parts of the closed vent system as unsafe to inspect if the requirements in paragraphs i. and ii. of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs a. and b. of this section.
 - i. You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the requirements.
 - ii. You have a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
 - e. Difficult to inspect requirements. You may designate any parts of the closed vent system as difficult to inspect, if the requirements in paragraphs i. and ii. of this section are met. Difficult to inspect parts are exempt from the inspection requirements of paragraphs a. and b. of this section.
 - i. You determine that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface.
 - ii. You have a written plan that requires inspection of the equipment at least once every 5 years.

[45CSR13, R13-1104, 4.2.6.]

- 5.2.5. The permittee shall meet all applicable monitoring, compliance demonstration, recording and reporting requirements given in 45CSR6 and 40 CFR 63, Subpart HH.

[45CSR13, R13-1104, 4.2.8.]

5.3. Testing Requirements

- 5.3.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3.1., the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations or minimum control device efficiencies established in this permit and/or applicable regulations.

[45CSR13, R13-1104, 4.3.1.]

- 5.3.2. In order to demonstrate compliance with 5.1.4.a., upon request of the Director, the permittee shall demonstrate compliance with the VOC/HAP emissions limits using GLYCalc Version 3.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.

[45CSR13, R13-1104, 4.3.2.]

- 5.3.3. The permittee shall meet all applicable performance testing requirements given in 45CSR6 and 40 CFR 63, Subpart HH.

[45CSR13, R13-1104, 4.3.3.]

- 5.3.4. Determination of glycol dehydration unit flowrate, benzene emissions, or BTEX emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate, benzene emissions, or BTEX emissions.

- a. The determination of actual flowrate of natural gas to a glycol dehydration unit shall be made using the procedures of either paragraph i. or ii. below.
 - i. The owner or operator shall install and operate a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The owner or operator shall convert annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.
 - ii. The owner or operator shall document, to the Administrator's satisfaction, the actual annual average natural gas flowrate to the glycol dehydration unit.
- b. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph i. or ii. below. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.
 - i. The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or
 - ii. The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in 40 CFR § 63.772(a)(1)(i) or (ii), or an alternative method according to 40 CFR §63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

[45CSR34, 40 CFR §63.772(b)]

5.4. Recordkeeping Requirements

- 5.4.1. **Thermal Oxidizer Pilot Flame Recordkeeping.** For the purpose of demonstrating compliance with the continuous pilot flame requirements in 5.1.6.c., the permittee shall maintain records of the times and duration of all periods when the pilot flame was not present and that vapors were vented to the

device:

- a. If the permittee is demonstrating compliance to 5.2.2. with visual inspections, the permittee shall maintain records of the inspections; and
- b. If the permittee is demonstrating compliance to 5.2.2. with an enclosed combustion device model that was tested under the conditions of 40 CFR §60.5413(d), a record shall be maintained of the performance test results.

[45CSR13, R13-1104, 4.2.4.]

5.4.2. **Closed Vent Recordkeeping.** To demonstrate compliance with the closed vent monitoring requirements in 5.2.4, records shall be maintained of:

- a. The initial compliance requirements;
- b. Each annual visual inspection conducted to demonstrate continuous compliance, including records of any repairs that were made as a result of the inspection;
- c. If you are subject to the bypass requirements, the following records shall also be maintained:
 - i. Each inspection or each time the key is checked out or a record each time the alarm is sounded; and
 - ii Each occurrence that the control device was bypassed. If the device was bypassed, the records shall include the date, time, and duration of the event and shall provide the reason that the event occurred. The record shall also include the estimate of emissions that were released to the environment as a result of the bypass.
- d. Any part of the system that has been designated as "unsafe to inspect" in accordance with 5.2.4.d. or "difficult to inspect" in accordance with 5.2.4.e.

[45CSR13, R13-1104, 4.2.7.]

5.4.3. **Record of Maintenance of Air Pollution Control Equipment.** For the pollution control equipment listed in Section 1.0 (2C), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-1104, 4.4.2.]

5.4.4. **Record of Malfunctions of Air Pollution Control Equipment.** For the air pollution control equipment listed in Section 1.0 (2C), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall

also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-1104, 4.4.3.]

- 5.4.5. The permittee shall meet all applicable record-keeping requirements given in 45CSR6 and 40 CFR 63, Subpart HH.

[45CSR13, R13-1104, 4.4.4.]

- 5.4.6. An owner or operator of a glycol dehydration unit that meets the exemption criteria in 40 CFR § 63.764(e)(1)(i) or 40 CFR §63.764(e)(1)(ii) shall maintain the records specified in paragraphs i. or ii. below, as appropriate, for that glycol dehydration unit.

- i. The actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) as determined in accordance with 40 CFR §63.772(b)(1), or
- ii. The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with 40 CFR §63.772(b)(2).

[45CSR34, 40 CFR §63.774(d)(1)]

5.5. Reporting Requirements

- 5.5.1. Any deviation of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 per section 5.2.3 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR13, R13-1104, 4.5.1.]

- 5.5.2. Any bypass event of the registered control device must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the date of the bypass, the estimate of VOC emissions released to the atmosphere as a result of the bypass, the cause or suspected cause of the bypass, and any corrective measures taken or planned.

[45CSR13, R13-1104, 4.5.2. (2C)]

- 5.5.3. Any time the air pollution control device is not operating when emissions are vented to it, shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days of the discovery.

[45CSR13, R13-1104, 4.5.3. (2C)]

5.6. Compliance Plan

- 5.6.1. None.

6.0. Emergency Generator Requirements [EG01, EG02]**6.1. Limitations and Standards**

- 6.1.1. The engines are subject to Class II General Permit G60-~~DC~~, and General Permit Registration G60-C029.
- a. The reciprocating internal combustion engines shall be operated and maintained in accordance with the manufacturer's recommendations and specifications ~~or in accordance with a site specific maintenance plan;~~ and, in a manner consistent with good operating practices.
- b. The emissions limitations from G60-C029 are as follows:

Emission Unit	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
EG01	Nitrogen Oxides	0.03	0.01
	Carbon Monoxide	0.39	0.1
	Volatile Organic Compounds	0.19	0.05
	Particulate Matter-10	0.02	0.01
	Formaldehyde	0.03	0.01
EG02	Nitrogen Oxides	0.03	0.01
	Carbon Monoxide	0.39	0.1
	Volatile Organic Compounds	0.19	0.05
	Particulate Matter-10	0.02	0.01
	Formaldehyde	0.03	0.01

[45CSR13 General Permit Registration G60-C029 and G60-~~DC~~, 5.1.2. and 5.1.41.]

- 6.1.2. **What parts of my plant does this subpart cover?** *Stationary RICE subject to Regulations under 40 CFR Part 60.* A new or reconstructed stationary RICE located at an area source must meet the requirements of 40 CFR part 63 subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
[45CSR34, 40 CFR §§63.6590(c) and (c)(1)]
- 6.1.3. **What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?** Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

Table 1: Emission Standards for Stationary Emergency Engines >25 HP

g/HP-hr			ppmvd at 15% O ₂		
NO _x	CO	VOC	NO _x	CO	VOC
2	4	1	160	540	86

Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[45CSR13, General Permit Registration G60-C029 and G60-C, 8.2.5; 45CSR16, 40 CFR §60.4233(e) and Table 1 to Subpart JJJJ of Part 60]

- 6.1.4. **How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?** Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in condition 6.1.3. over the entire life of the engine. [45CSR13, General Permit Registration G60-C029 and G60-C, 8.2.9; 45CSR16, 40 CFR §60.4234]

~~6.1.5 For the purposes of General Permit G60-D, emergency generator means a generator whose purpose is to allow key systems to continue to operate without interruption during times of utility power outages. [45CSR13, General Permit Registration G60-C029 and G60-D, 5.1.1]~~

- 6.1.65 Maximum ~~Hourly Fuel Consumption~~ Limitation. The maximum ~~hours of operation~~ fuel consumption for any registered ~~emergency generator reciprocating internal combustion engine~~ listed in the General Permit Registration application shall not exceed ~~500 hours per year~~. the fuel consumption recorded with registrant's Class II General Permit Registration Application without effecting a modification or administrative update. Compliance with the Maximum Yearly ~~Hourly Operation Fuel Consumption~~ Limitation shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the ~~hours of operation fuel consumption~~ at any given time during the previous twelve consecutive calendar months. [45CSR13, General Permit Registration G60-C029 and G60-DC, 5.1.3]

6.1.6. Operation and Maintenance of Air Pollution Control Equipment. The registrant shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in the issued General Permit Registration and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. [45CSR13, General Permit Registration G60-C029 and G60-C, 4.1.1.]

6.1.7 Minor Source of Hazardous Air Pollutants (HAP). HAP emissions from the affected facility shall be less than 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the affected facility is a minor HAP source. [45CSR13, General Permit Registration G60-C029 and G60-C, 4.1.2.]

~~6.1.7 The permittee shall comply with all applicable NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air~~

~~Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.~~

~~[45CSR13, General Permit Registration G60-C029 and G60-D, 5.1.6]~~

~~6.1.8 The emission limitations specified in section 6.1.1 shall apply at all times except during periods of start up and shut down provided that the duration of these periods does not exceed 30 minutes per occurrence. The permittee shall operate the engine in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of start up and shut down. The emissions from start up and shut down shall be included in the twelve (12) month rolling total of emissions. The permittee shall comply with all applicable start up and shut down requirements in accordance with 40 CFR Part 60, Subparts HH, JJJ and 40 CFR Part 63, Subpart ZZZZ. [45CSR13, General Permit Registration G60-C029 and G60-D, 5.1.7]~~

6.2. Monitoring Requirements

6.2.1. If the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

~~[45CSR13, General Permit Registration G60-C029 and G60-C, 8.3.8; 45CSR16, 40 CFR §60.4237(b)]~~

6.2.2. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in section 6.1.3., you must demonstrate compliance according to the method specified in paragraph 1. below.

1. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to the method specified in 40 CFR §63.4243(a)(1).

If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

~~[45CSR13, General Permit Registration G60-C029 and G60-C, 8.4.1.a and 8.4.2.a; 45CSR16, 40 CFR §§60.4243(b)(1) and (a)(1)]~~

6.2.3. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs 1. through 3. below. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If you do not operate the engine according to the requirements below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary ICE in emergency situations.

2. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraph i. below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by section 6.2.3.3. counts as part of the 100 hours per calendar year allowed by this paragraph.
 - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
3. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 6.2.3.2. Except as provided below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- D. The power is provided only to the facility itself or to support the local transmission and distribution system.
- E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[[45CSR13, General Permit Registration G60-C029 and G60-C, 8.4.4](#); [45CSR16, 40 CFR §60.4243\(d\)](#)]

- 6.2.4. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of section 6.1.3. [\[45CSR13, General Permit registration G60-C029 and G-60C, 8.4.5; 45CSR16, 40 CFR §60.4243\(e\)\]](#)
- 6.2.5. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR §94.11(a). [\[45CSR13, General Permit registration G60-C029 and G60-C, 8.4.6; 45CSR16, 40 CFR §60.4243\(f\)\]](#)
- 6.2.6. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [\[45CSR13, General Permit Registration G60-C029 and G60-C, 8.4.7; 45CSR16, 40 CFR §60.4243\(g\)\]](#)
- 6.2.7. Requirements for Use of Catalytic Reduction Devices
- a. Rich-burn ~~engine(s)~~ [natural gas compressor engines](#) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the ~~emission limit listed in the General Permit Registration potential to emit~~ for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to [deliver additional fuel when required to](#) ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 2%-0.5%. [The automatic air/fuel ratio controller shall also incorporate dual-point exhaust gas temperature and oxygen sensors which provide temperature and exhaust oxygen content differential feedback. Such controls shall ensure proper and efficient operation of the engine and NSCR air pollution control device;](#)
 - ~~b. For engine(s) equipped with a catalyst, the registrant shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the registrant shall also check for thermal deactivation of the catalyst before normal operations are resumed.~~
 - ~~c. The registrant shall follow a written operation and maintenance plan that provides the periodic and annual maintenance requirements.~~
 - b. [The automatic air/fuel ratio controller or closed-loop automatic feedback controller shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element; and](#)
 - c. [No person shall knowingly:](#)
 1. [Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A;](#)

2. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A; or
3. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

[45CSR13, General Permit Registration G60-C029 and G60-~~DC~~, 5.1.54.a, 5.1.544.c, and 5.1.544.d]

6.2.8. Catalytic Reduction Devices

- a. The registrant shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The registrant shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:
 1. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.
 2. Following the catalyst manufacturer emissions related operating and maintenance recommendations; or develop, implement, or follow a site specific maintenance plan of the catalyst element manufacturer.

[45CSR13, General Permit Registration G60-C029 and G60-~~DC~~, 5.2.1]

6.3. Testing Requirements

- 6.3.1. None. The permittee shall comply with all applicable testing requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.

[45CSR13, General Permit Registration G60-C029 and G60-D, 5.4.1]

- 6.3.2 To demonstrate compliance with condition 6.2.7(a), the permittee shall verify that the closed loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a fuel rich mixture and a resultant exhaust oxygen content of less than or equal to 2% during any performance testing.

[45CSR13, General Permit Registration G60-C029 and G60-D, 5.4.2]

6.4. Recordkeeping Requirements

- 6.4.1. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs 1. through 3. below.

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.
2. Maintenance conducted on the engine.
3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

[45CSR13, General Permit Registration G60-C029 and G60-C, 8.6.1.a; 45CSR16, 40 CFR §60.4245(a)]

- 6.4.2. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency

operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[45CSR13, General Permit Registration G60-C029 and G60-C, 8.6.1.b; 45CSR16, 40 CFR §60.4245(b)]

- 6.4.3. To demonstrate compliance with conditions 6.1.1 and 6.1.5, the permittee shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, General Permit Registration G60-C029 and G60-C, 5.4.1]

- ~~6.4.3. To demonstrate compliance with condition 6.1.6, the permittee shall maintain records of the hours of operation of the emergency generator(s) on a monthly basis.~~
~~**[45CSR13, General Permit Registration G60-C029 and G60-D, 5.3.1.]**~~

- ~~6.4.4. To demonstrate compliance with condition 6.1.1, the permittee shall maintain records of the maintenance performed on each emergency generator.~~
~~**[45CSR13, General Permit Registration G60-C029 and G60-D, 5.3.2]**~~

- ~~6.4.5. To demonstrate compliance with condition 6.2.8, the permittee shall maintain a copy of the site specific maintenance plan or manufacturer maintenance plan.~~
~~**[45CSR13, General Permit Registration G60-C029 and G60-D, 5.3.3]**~~

- ~~6.4.6. The permittee shall comply with all applicable recordkeeping requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.~~
~~**[45CSR13, General Permit Registration G60-C029 and G60-D, 5.3.4]**~~

- ~~6.4.7. All records required by this section shall be maintained in accordance with condition 3.4.2.~~
~~**[45CSR13, General Permit Registration G60-C029 and G60-D, 5.3.5]**~~

6.5. Reporting Requirements

- 6.5.1. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in section 6.2.3.3., you must submit an annual report according to the requirements in 40 CFR § 60.4245(e).
[45CSR16, 40 CFR §60.4245(e)]

- ~~6.5.2. The permittee shall comply with all applicable notification requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission~~

~~Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.~~

~~[45CSR13, General Permit Registration G60-C029 and G60-D, 5.5.1]~~

6.6. Compliance Plan

6.6.1. N/A

7.0. Engine Requirements [EN01, EN02]

(Note: In this section “this subpart” refers to 40 CFR 63 Subpart ZZZZ)

7.1. Limitations and Standards

7.1.1. When do I have to comply with this subpart?

- a. *Affected sources.* If you have an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.
- b. If you own or operate an affected source, you must meet the applicable notification requirements in in 40 CFR part 63, subpart A.
[45CSR34, 40 CFR §§63.6595(a)(1) and (c)]

7.1.2. What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart.

Table 2d to Subpart ZZZZ of Part 63— Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
Non-emergency, non-black start 2SLB stationary RICE	a.Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b.Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and replace as necessary;	
	c.Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	

¹ Sources have the option to utilize an oil analysis program as described in 40 CFR §63.6625(j) in order to extend the specified oil change requirement in Table 2d of this subpart
[45CSR34, 40 CFR §63.6603(a); Table 2d(6) of 40 CFR 63 Subpart ZZZZ]

7.1.3. What are my general requirements for complying with this subpart?

- a. You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

- b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34, 40 CFR §63.6605]

- 7.1.4. How do I demonstrate continuous compliance with the emission limitations and operating limitations?

- a. You must demonstrate continuous compliance with each emission limitation and operating limitation in Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements.

As stated in 40 CFR §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by
Existing non-emergency 2SLB stationary RICE located at an area source of HAP	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- b. You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d in section 7.1.2. that applies to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.6650.
- c. You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

[45CSR34, 40 CFR §§63.6640(a), (b), and (e) and Table 6(9) of 40 CFR 63 Subpart ZZZZ]

- 7.1.5. The permittee shall meet the applicable general provisions specified in Table 8 of 40 C.F.R. 63 Subpart ZZZZ with the exception of 40 CFR §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) which do not apply per 40 CFR §63.6645(a)(5).

[45CSR34, 40 CFR §§ 63.6665, 63.6645]

7.2. Monitoring Requirements

7.2.1. What are my monitoring, installation, collection, operation, and maintenance requirements?

- a. You must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- b. You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
- c. If you own or operate a stationary SI engine that is subject to the work, operation or management practices in 6 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[45CSR34, 40 CFR §§63.6625(e), (h), and (j)]

7.3. Testing Requirements

7.3.1. N/A

7.4. Recordkeeping Requirements

7.4.1. What records must I keep? Permittee shall comply with 40 CFR §§ 63.6655 (a), (b), (d) & (e).

- a. If you must comply with the emission and operating limitations, you must keep the records described in paragraphs a.1. through a.5., b.1. through b.3. and c. of this section.
 1. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv).
 2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

3. Records of performance tests and performance evaluations as required in 40 CFR § 63.10(b)(2)(viii).
 4. Records of all required maintenance performed on the air pollution control and monitoring equipment.
 5. Records of actions taken during periods of malfunction to minimize emissions in accordance with section 7.1.3.b. of this permit, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- b. For each CEMS or CPMS, you must keep the records listed in paragraphs b.1. through 3. of this section.
1. Records described in 40 CFR §63.10(b)(2)(vi) through (xi).
 2. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR §63.8(d)(3).
 3. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR §63.8(f)(6)(i), if applicable.
- c. You must keep the records required in Table 6 of this subpart (section 7.1.4. of this permit) to show continuous compliance with each emission or operating limitation that applies to you.
- d. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

[45CSR34, 40 CFR §§63.6655(a), (b), (d) and (e)(3)]

7.5. Reporting Requirements

7.5.1. N/A

7.6. Compliance Plan

7.6.1. N/A